derived from the demand for interexchange services. For example, because interexchange services that use switched and special access are in the same market—i.e., are substitutable for one another, differing primarily in their access arrangements—it follows logically that the access services themselves are substitutable as well and therefore in the same market.

Although at times the Notice seems to regard the validity of this proposition as requiring further demonstration or proof, at other times it seems to accept it. For example: the Notice states:

> Rate regulation may distort the prices access customers pay for services by holding them at levels that are either above or below their economic costs. Prices set above the economic cost of providing service distort consumer decision-making. Above cost prices for interstate access services, for example, likely result in higher interstate retail toll prices and cause toll customers at the margin to consume other goods and services rather than to increase their use of interstate long distance services. *Such prices also cause high-volume and even moderate-volume business customers to substitute dedicated facilities, which may be the local exchange carrier's special access facilities, or those of an alternative provider, even where the use of such facilities is not economically efficient, if the price of dedicated access is less than an above cost price that the customer would pay for services that use switched access.*[26]

The demand substitutability between switched and special access was, in fact, one of the major reasons for the rate reductions in the former effected by the Commission's plan to reduce the carrier common line charge and impose a subscriber line charge. Had it not done so, the uneconomic use of dedicated facilities, which the Commission is rightfully concerned about here, would undoubtedly have been greater than it has been.

These two forms of access are in the same economic market, also, because there is a high degree of substitutability between them on the supply side: certain network facilities can be easily be used for switched or dedicated services. This high degree of supply substitutability

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[26] Notice, p. 15 (stress supplied; footnotes omitted). In one of the footnotes, the discussion continues:

> Switched access prices that impose excessive charges on large users create an incentive for them to substitute dedicated for switched access even if the cost the carrier incurs to provide the dedicated access is greater than the cost to the LEC of providing the switched access. Such inefficiencies are magnified in areas where there are numerous high volume toll users coupled with the availability of competing services.

was one of the important reasons for the FCC's restructuring transport so that the same price for the transport function would be charged for both switched and dedicated uses.

The high degree of demand and supply substitutability was an important consideration also in recent Commission actions requiring the LECs to offer expanded interconnection to their rivals. In its proceeding considering expanded interconnection for special access, we expressed the belief that the Commission had to take into account the effect that action would have on the use of switched access;[27] and the FCC did then proceed to order collocation for the latter service as well.

The Notice specifically asks for quantitative evidence on the cross elasticities among access services.[28] Econometric estimation would be difficult for a number of reasons: (1) the product definitions and price structures, especially for special access services, tend to be complicated; (2) data are not necessarily maintained in a way conducive to demand analysis; (3) in recent years, there has been relatively little price variation in access services and (4), historically, switched and special access prices have moved in the same direction—downward.

Fortunately, the January 1, 1995 rate changes in California provided something like a laboratory experiment that overcomes these difficulties. Before these rate changes, charges for both switched and special access had been relatively flat; then, in one step, the charge for intrastate switched access alone was reduced by 50 percent.[29] As a result:

- Switched access volumes have grown by 27 percent over the previous year, in sharp contrast with an annual growth rate of 6 percent before the price change.[30]

- Intrastate DS-1 special access growth has virtually stopped (and may, in fact, be reversing itself); this development contrasts abruptly with a 45 percent annual growth rate before switched access prices were reduced.

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[27] Affidavit of Alfred E. Kahn, In the Matter of Expanded Interconnection with Local Telephone Company Facilities, CC Docket No. 91-141, August 6, 1991.

[28] Notice, p. 54.

[29] Although the tariffed rate for DS-1 intrastate special access did not change much, a 30 percent surcredit was removed. This had the effect of increasing the rate.

[30] Declaration of Timothy J. Tardiff and Lester D. Taylor, Submitted to the California Public Utilities Commission on behalf of Pacific Bell, August 28, 1995. In addition to the substitution of switched for special access, the 27 percent increase in switched access volumes reflected also the increased total demand for access resulting from the initiation of intraLATA toll competition on January 1, 1995. This growth accounted for about one-third of the 27 percent growth in demand for switched access.

These findings clearly demonstrate a strong cross-elasticity between the two services: The decrease in the price of switched access resulted in its substitution of switched for special access, just as was to have been expected.[31] In particular, the price change shifted the monthly crossover volume at which intrastate special access becomes more economic from about 18,000 to about 45,000 minutes.

b. There is a great deal of competition in certain areas of California

Under its plan, Pacific would be required to make a showing of the sufficiency of competition in particular geographic areas. In its Comments, the Company does provide information clearly suggestive of the presence of strong competition in certain areas. This information includes:

- Statistics on the concentration of demand in particular locations.
- Demonstrations that competitors have installed a great deal of capacity in or on proximity to certain concentrated metropolitan areas.
- Evidence of substantial inroads by competitors in the market for services in those areas—for example, Pacific's dramatic loss of share in the 800 market and competitive inroads also in the provision of high capacity facilities.
- The presence of vigorous price competition for these services.

This kind of information demonstrates that in these particular areas purchasers of access services have competitive alternatives to Pacific's services readily available to them and that suppliers have the capacity to accommodate their demand—all strongly suggesting that the LECs have little market power and that streamlined regulation is therefore warranted.

B. Simplifying Baskets and Bands

For those services remaining under price caps, Pacific proposes to (1) consolidate baskets and bands according to the degree of substitutability of services and (2) expand the

[31] We are informed that the IXCs have, in fact, passed through very little of the reduction in switched access prices on their intrastate interLATA toll prices. Therefore, the growth in switched access volumes appears to reflect primarily the entry of the new intraLATA toll competition and the cross-elasticity between that service and special access.

flexibility afforded by zone density pricing to additional services whose demand and cost characteristics vary geographically.

As a general proposition, the imposition of baskets and bands involves a trade-off between the price flexibility that the LEC needs to respond to competition, on the one hand, and preventing cross subsidization and predatory pricing, on the other. The latter objective is accomplished by assigning substitutable services—substitutable on the demand and/or on the supply side—to the same category. In the limiting case, a single basket provides the greatest degree of flexibility, while assigning every service to its own basket provides the maximum safeguard.

The consolidation proposed by Pacific appears to involve a more precise assignment of services into substitutable categories and appears therefore to be consistent with the rationale that led to treating dedicated switched transport and special access in the same basket. For example, DS-1 and DS-3 facilities are substitutable in much the same way as switched and special access are; there is an economic cross-over point depending upon traffic volume and the respective prices.

We similarly support Pacific's proposals to deaverage local switching charges by density zones and to restructure carrier common line and subscriber lines prices. Both changes would provide the Company with the flexibility to reflect differences in cost and respond to differences in demand. For example, the same facilities-based competition that creates a need for zone density pricing for transport similarly justifies comparable flexibility in local switching and common line charges: the LECs need the flexibility to respond to the full range of competitive offerings.

Just as dedicated and switched access are substitutes for one another, so are switching and transport. And just as overpricing of the latter service becomes unsustainable in the presence of competition and promotes inefficient choices on the part of customers, so may the overpricing of switching result in inefficient crossovers from the one to the other. Under these circumstances, as well, the intensifying competition clearly requires that the incumbent LECs be granted additional flexibility in their pricing, to discourage customers making such inefficient choices.

C. Additional Limitations on Upward Pricing Flexibility

The current price cap plan restricts upward pricing flexibility in two ways. First, the classification of services into baskets and the additional limitations imposed by pricing bands limit the pricing flexibility for individual services. Second, the price cap index places an overall restriction on the average price level of the firm. As competition replaces regulation, which Pacific's plan anticipates, there is no compelling reason for withdrawing previously extended relaxations of restrictions on upward pricing flexibility. Accordingly, Pacific's plan is designed to maintain the same (rather than increased) protection against rate increases as is provided in the current price cap plan.

Turning first to individual services, we previously explained why there should be no link between the introduction of streamlined regulation and/or the exercise of downward price flexibility for certain services and the imposition of additional restrictions on others. In particular, (1) such restrictions are not a necessary safeguard against predatory pricing and (2) there is no logical basis for more stringent price controls on less competitive services as the more competitive services are removed from price caps.

Turning now to the overall constraint on average prices afforded by the price cap index, we observe that when all (or most) services are under price caps, the index serves as a mechanism for providing the LEC the opportunity to recover its costs when its productivity meets the target level. Pacific's proposed changes in the rules would start with current prices and then apply caps to these prices under the modified basket/band structure. In effect, its plan amounts to a restart of the price cap mechanism, with current prices serving as the starting point. If (1) these prices are reasonable (which they are presumed to be under a properly working plan) and (2) the indexation formula is reasonable, then restarting price caps in this fashion should continue to afford Pacific the opportunity to recover its costs.

The situation is complicated when services are removed from price cap treatment. In this case, the fortunes of the LEC could change as the previously prevailing index continues to be applied without regard to what is happening to the newly streamlined services.

For example, if the upper constraint on transport services in the aggregate is now being satisfied by a combination of downward price flexibility in competitive areas and upward

flexibility in less competitive areas, it follows as a matter of simple arithmetic that if the competitive areas are removed from price caps, the upward price flexibility formerly provided would be reduced. For reasons we have already discussed, such indirect restrictions could be just as damaging as explicit restrictions newly imposed as a price exacted for streamlined treatment. Clearly when services are removed from price caps, the mechanism should be carefully reexamined to detect and eradicate any such consequent biases. Pacific's proposed one-time adjustment of the price cap or service band indexes is designed to accomplish this objective.

IV. SUMMARY AND CONCLUSIONS

Pacific's proposed simplifications and revisions of the price cap formulas are wholly consistent with the Commission's proclaimed policies of (1) relying on competition in place of regulation wherever effective competition is feasible, (2) rendering residual regulation as consistent as possible with emerging competition, while (3) continuing to protect both competitors and ultimate customers who continue to be dependent on Pacific for the supply of essential inputs and essential retail services.

As Pacific successfully demonstrates that services in some concentrated metropolitan areas are properly removed from price cap regulation, there is no justification whatever for its losing such limited upward pricing flexibility as it enjoys under the present regime, whether by deliberate change in the Commission's rules or as the mechanical, arithmetic effect, under the present formulas, of withdrawing competitive services from the price cap regime.

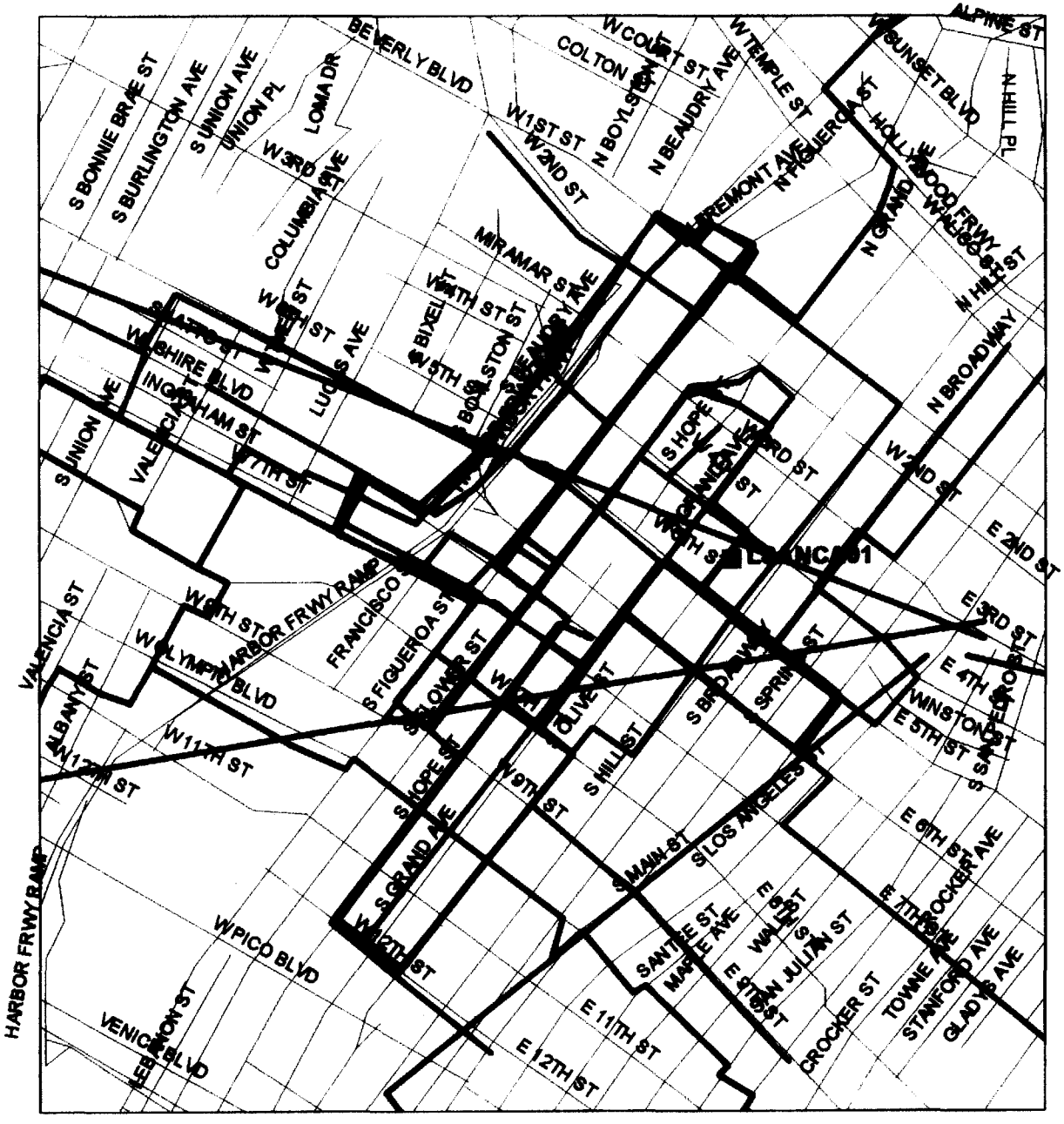
ATTACHMENT 2

FIBER MAPS

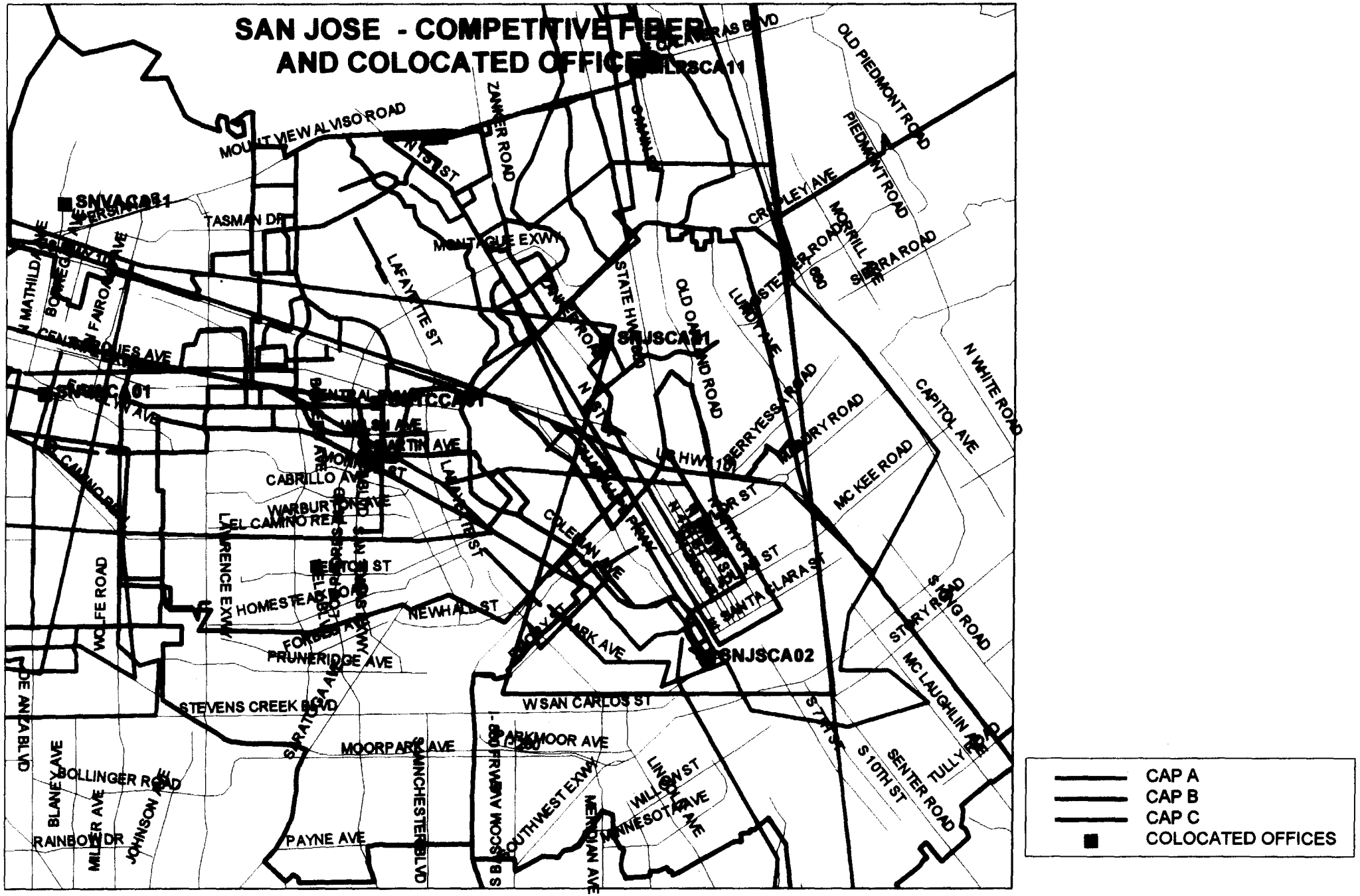
SAN FRANCISCO - CAP FIBER AND COLOCATED OFFICES

CAP A
CAP B
COLOCATED OFFICES

LOS ANGELES REGION
CAP FIBER AND COLOCATED OFFICES



CAP A
CAP B
COLOCATED OFFICES


SAN JOSE - COMPETITIVE FIBER AND COLOCATED OFFICES
SRSCA11
SMVACA01
SSNJCA01
SNJSCA01
SNJSCA02
MOUNT VIEW ALVISO ROAD
ZANKER ROAD
TASMAN DR
MONTAGUE EXWY
LAFAYETTE ST
STATE HWY 237
OLD OAKLAND ROAD
OLD PIEDMONT ROAD
PIEDMONT ROAD
CROTHERS ROAD
MORRILL AVE
SIERRA ROAD
N WHITE ROAD
CAPITOL AVE
BERRYESSA ROAD
MCKEE ROAD
MC KEE ROAD
CABRILLO AVE
WARBURTON AVE
EL CAMINO REAL
WOLFE ROAD
LAWRENCE EXWY
HOMESTEAD RD
NEWHALL ST
FORBES AVE
PRUNERIDGE AVE
STEVENS CREEK BLVD
SARATOGA AVE
MOORPARK AVE
BOLLINGER ROAD
PAYNE AVE
SAN TOMAS AQUINO CREEK
SAN THOMAS EXPWY
COLEMAN AVE
PARK AVE
SANTA CLARA ST
W SAN CARLOS ST
I-880 FREEWAY
I-280
SOUTHWEST EXWY
MERIDIAN AVE
WILLOW ST
LINCOLN AVE
MINNESOTA AVE
S 10TH ST
SENTER ROAD
TULLY RD
MC LAUGHLIN AVE
STORY ROAD
KING ROAD
CAP A
CAP B
CAP C
COLOCATED OFFICES